CITY OF BURBANK

ELECTRICAL ENGINEERING ASSOCIATE I

DEFINITION

Under supervision, to perform entry level professional electrical engineering work in an electric utility; and perform related work as required.

ESSENTIAL FUNCTIONS

Makes detail design and construction drawings for rebuilding or adding to electrical generation, transmission or distribution facilities; prepares specifications and detailed materials lists for rebuilding or adding to electrical power system facilities; initiates authorization and agreements for joint use of electrical distribution poles and related equipment; performs field work such as inspection of the condition and location of power poles, primary and secondary lines, transformer and other types of electrical equipment, inspection of electric line extension and replacement work, and checks field conditions and the progress of electrical construction; investigates transformer loads of industrial, commercial and residential areas and determines overloaded transformers; investigates complaints concerning low lines, lines crossing private property, and related problems; performs elementary system load flow, stability, and short circuit studies; prepares calculations for transmission and distribution system relay settings and voltage regulation problems; performs studies of alternative approaches to additions to electric power system; prepares data for reports to governmental and industrial agencies; maintains records and charts of system load growth; prepares calculations and charts relating to utility rate studies and graphs for analysis of operations, load, flow, and loss studies; performs drafting work; prepares and maintains accurate reports and records, both manually and electronically; drives on City business.

MINIMUM QUALIFICATIONS

Employment Standards:

- Knowledge of - principles of electricity, physics and mathematics; electrical drafting methods and equipment; elementary characteristics of transformers and transmission lines.

- Skill in - drafting and engineering related drawing; operating modern computers and related software.

- Ability to - anticipate overloaded conditions; use mathematical tables, understand technical graphs, charts, legal property descriptions, engineering records and maps; draft and prepare maps and graphs; read wiring diagrams; follow directions and prepare accurate reports; utilize computers in the performance of complex calculations; communicate effectively, both orally and in writing; establish and maintain effective working relationships with supervisors, fellow employees, and the public.

Education/Training: Graduation from an accredited college or university with a Bachelor of Science degree in Electrical Engineering. Note: A Bachelor of Science degree in an engineering or science field other than electrical engineering, but with upper class course work in electrical engineering, may be qualifying. College seniors are eligible to apply, however, appointment cannot be made until proof of graduation with a Bachelor of Science degree in electrical engineering is submitted. Registration as an Electrical Engineer in the State of California may be substituted for the education requirement.

License & Certificates: A valid California Class “C” driver’s license or equivalent at time of appointment.

SUPPLEMENTAL INFORMATION

Desirable Qualifications: Proficiency in AutoCAD and certification as an engineer-in-training in the State of California.